Neurotrauma Care Pathways

Are you part of the problem or part of the solution? Devising Collaborative Strategies for the Implementation of the Neurotrauma Care Pathways

Friday February 7, 2025

10:45 – 11:45 AM and 12:45 -13:45 pm

Workshop 3

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UHN Toronto Rehabilitation Institute
The KITE Research Institute

Ontario
Ministry of Health & Long Term Care

Land Acknowledgement

We acknowledge that we are on the traditional territory of many Indigenous nations. In Toronto these include the lands of the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples. Today, the meeting place of Toronto is still the home to many Indigenous peoples from across Turtle Island and we are grateful to have the opportunity to work and learn on this territory.

In this Land Acknowledgment, we recognize and respect Indigenous Peoples as traditional stewards of this land and the enduring relationship that exists between Indigenous Peoples and their traditional territories. We recognize the importance of reflecting on what occurred in the past as an important step to reconciliation with our Indigenous communities and other communities that have experienced hardship as part of our colonial past.

We also recognize the challenges and discrimination that can exist in the healthcare system towards persons with Indigenous Background. As healthcare providers, system evaluators and planners, it is our responsibility to identify and implement mechanisms to provide equitable and culturally sensitive care.

Disclosures

The Presenting Authors have an employment relationship with UHN-Toronto Rehab - KITE

- *Any data presented here were supported by ICES, which is funded by an annual grant from the Ontario Ministry of Health (MOH) and the Ministry of Long-Term Care (MLTC). This document used data adapted from the Statistics Canada Postal Code Conversion File, which is based on data licensed from Canada Post Corporation, and/or data adapted from the Ontario Ministry of Health Postal Code Conversion File, which contains data copied under license from Canada Post Corporation and Statistics Canada. Parts of this material are based on data and/or information compiled and provided by CIHI. The analyses, conclusions, opinions and statements expressed herein are solely those of the authors and do not reflect those of the funding or data sources; no endorsement is intended or should be inferred*

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Some Key (Yet Uncomfortable) Questions

1. Aside from funding, what do you think is the biggest barrier to the receipt of equitable care after brain injury?

2. If you had a brain injury, would you want to be treated where you work?

3. How would you rate the care that you/your organization provides (1-10)?

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In their own words....

From Persons with Lived Experience of TBI.....

- Rehab, if they get it, does not feel relevant, and **they feel unprepared** to continue their recovery in the community, which is lifelong
- If people have family members involved, family members are **thrust into needing to know everything** and it can be a full-time job to advocate for needed supports and services; it can be very **stressful**
- Many healthcare **providers are unprepared** to address TBI needs and concerns; they do not understand the ongoing sequelae and chronic nature of the condition that needs are likely to change overtime
- **Who** should be following them in the community? **Who** do they go to for help? **What** is even available to them?

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In their own words....

Unprepared

Confused

Stressed

Frustrated

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Gaps In TBI Care

https://www.neurotraumapathways.ca

A. General **gap of Equity Considerations** in care; poor overall care documentation and considerations regarding financial status, marginalized groups, comorbidities and geographical location

B. **Poor availability of diagnostic imaging** in rural and remote areas

C. **Inability to provide timely consultation and surgery** for people living in remote areas

D. **Lack of education mechanisms** for healthcare/service providers, persons with lived experience and families

E. **Poor communication and planning** between interprofessional teams during transfers, especially transitions to non-specialized centers

F. **Lack of or inappropriate transition planning** to link patients to primary care and specialized navigation

G. **13.5%** of moderate to severe traumatic brain injuries receive inpatient rehabilitation in ON; **only 6.5%** receive specialized inpatient rehabilitation

H. **Poor availability of Specialized Outpatient Rehabilitation** services, especially for those living in remote areas or not attending specialized inpatient rehabilitation

I. **Poor availability, limited interprofessional collaborations, and inappropriate funding** models for family doctors and team-based primary care

J. **Access to Community Services and Supports is limited** to personal funds, insurance and/or extended health care benefits

K. **Lack of or inappropriate specialized system navigation support**

L. **Lack of ongoing care, services and supports** for families/friends in the community

M. **Weak mechanisms to re-access rehabilitation** once patient returns to the community

Some Other Questions....

1. **What does care that is rated as ‘10’ look like?**

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Some Other Questions….

2. If we could design services without any regard for the status quo, what would these services look like?

- **Inpatient acute care?**
- **Rehabilitation (inpatient and outpatient)?**
- **Community supports and services?**
- **Medical follow-up care?**

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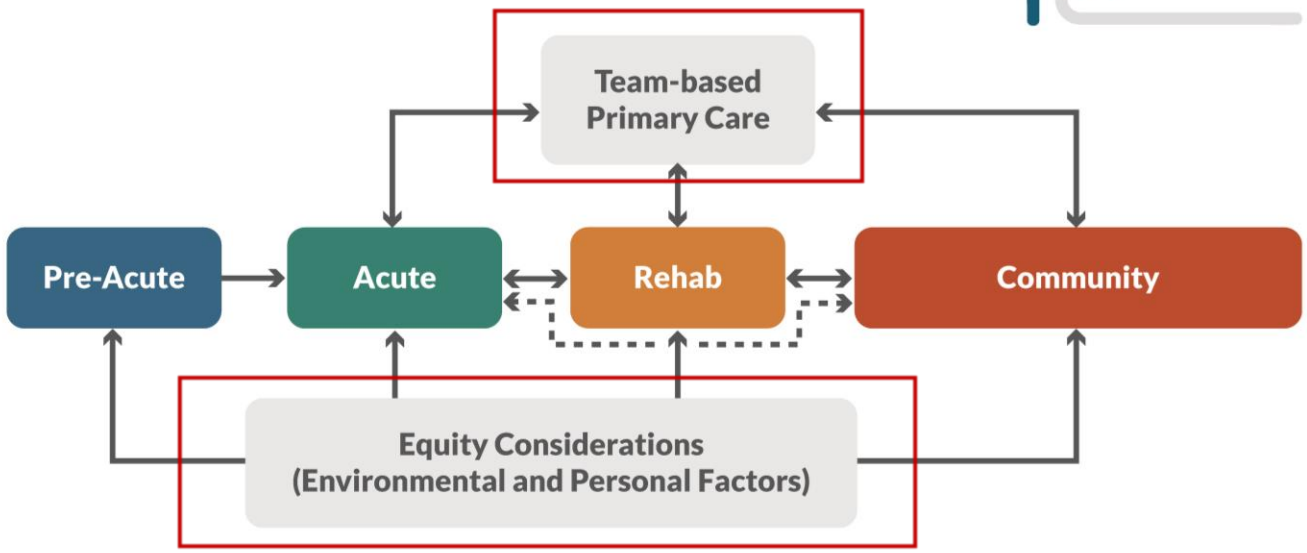

Neurotrauma Care Pathways Interactive Website:
https://www.neurotraumapathways.ca

- The process involved co-creation with key partners across the province, particularly persons with lived experience
- Each care stage contains building blocks (key elements of care), which are linked to existing evidence-based CPGs and consensus-based recommendations

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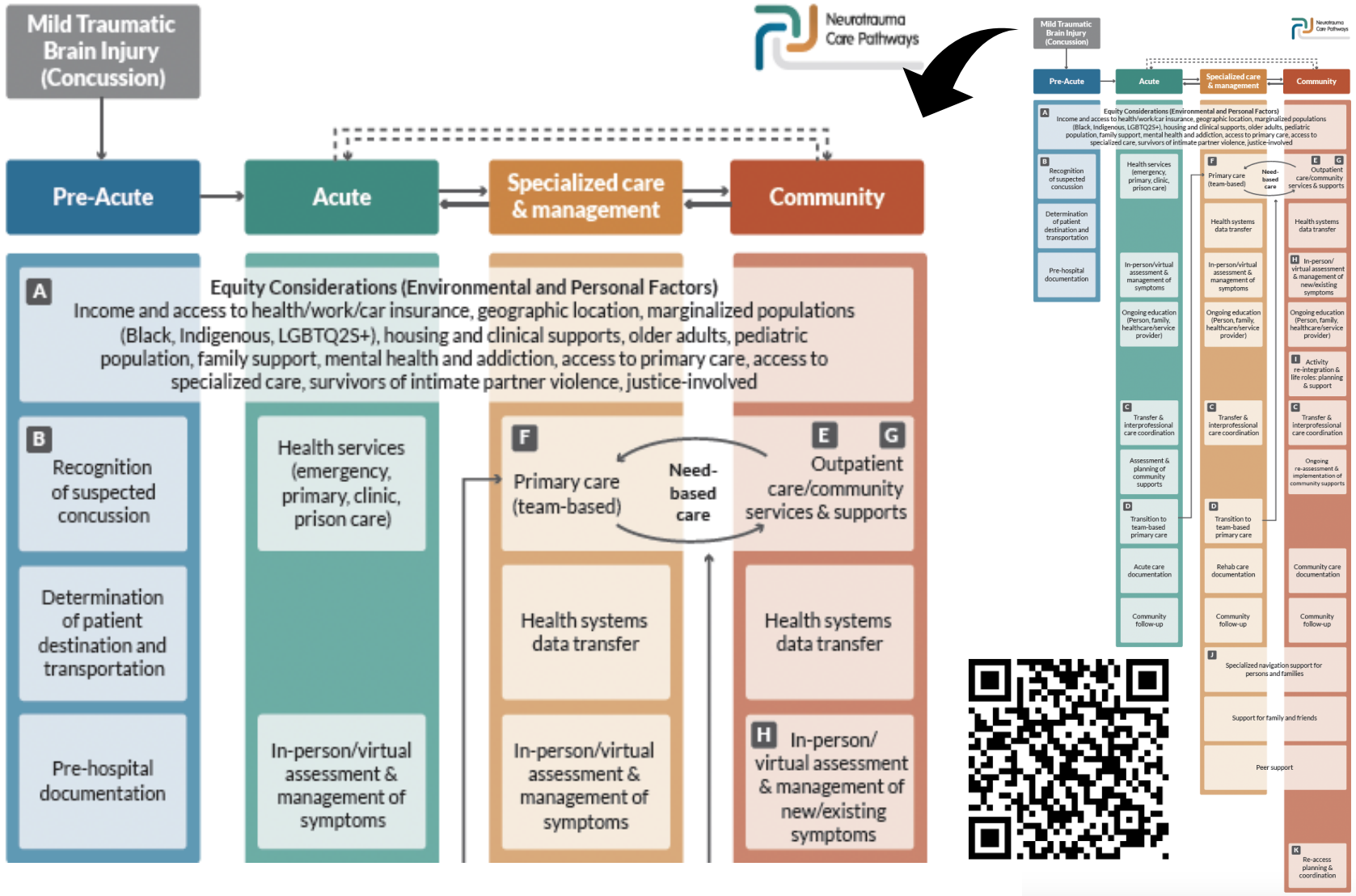
Care Pathways

Ideal Care Pathways

Current Gaps in current care are addressed by the Ideal Care Pathways

Implementation of the building blocks can be measured by **companion quality indicators** to facilitate uptake by health care providers and system planners.



Summary of Implementation Priorities

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Provincial Priorities by injury type

Mild Traumatic Brain Injury (Concussion)

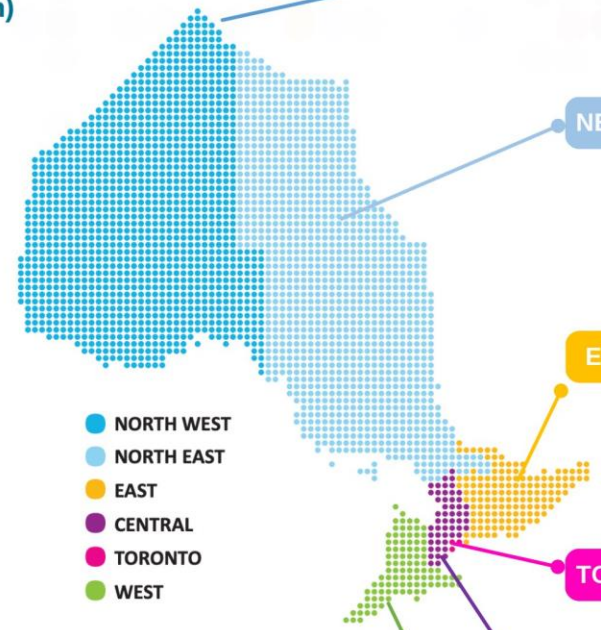
- Improve initial recognition in the community
- Standardize specialized assessments

Moderate to Severe Traumatic Brain Injury

- Improve documentation of injury severity and outcomes
- Improve access to cognitive and behavioural services

Traumatic Spinal Cord Injury

- Improve physical accessibility of care and services
- Improve access to transportation
- Increase availability and quality of personal support workers



Provincial Priorities by clinical subpopulations

Older adults

- Improve access to community services and supports for older adults with lived experience
- Improve funding, services and resources for family and friends supporting older adults living with brain and spinal cord injuries

Mental Health & Addiction

- Improve education/training about brain and spinal cord injury and concurrent mental health and addiction
- Increase availability of accessible housing with specialized mental health and addiction clinical supports

Indigenous health

- Develop a Roadmap for Success document describing the commitments of the Neurotrauma Care Pathways initiative towards Indigenous Health
- Consult and choose strategic priorities with the Indigenous communities

Priorities by Ontario Health Region

NW

Education: injury awareness and basic training
Housing: stock and clinical supports
Staff: availability and retention of acute and rehab specialized staff
Coordination: System navigation support

Educ
Coord

NE

Education: injury awareness and basic training
Housing: stock and clinical supports
Staff: availability and retention of neuropsychiatric staff
Coordination: Integrate hospital and community care health data, implement peer support

Educ
Coord

E

Education: injury awareness, basic training for non-specialized care providers, care integration
Housing: stock and clinical supports; accessibility and infrastructure in shelters
Community services: increase availability of specialized services
Coordination: implement transitional teams; life-long follow-ups/check-ins; respite for families/friends

Educ
Coord

TO

Education: injury awareness, basic training, peer support awareness, support for non-specialized centres
Community services: support independence and community participation, access to team-based primary care

Educ

CE

Education: injury awareness, basic training, self-advocacy skills for persons with lived experience, peer mentorship
Community services: remove barriers in intake criteria, access to team-based primary care
Coordination: warm hand-offs, integrate hospital and community care health data, accountability for referrals

Educ
Coord

W

Education: basic training for non-specialized care providers, awareness of services for persons with lived experience and their families
Community services: expand availability, peer mentorship for primary care
Staff: availability and retention of acute and rehab specialized staff

Educ

Pilot Implementation

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Implementation project outcomes for each Ontario Health Region

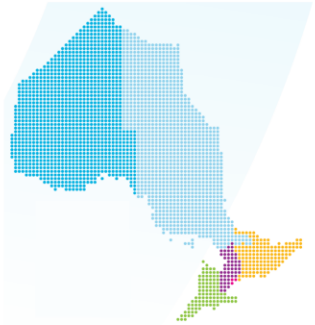

Image adapted from Ontario Health's Strategic Plan

Access more details about the Implementation Projects here:

NORTH WEST

St. Joseph's Care Group
Thunder Bay

a non-specialized rehab hospital improving transition and quality of primary care for users and providers through the development of SCI checklists of key areas for follow-up.

NORTH EAST

Health Sciences North
Sudbury

a non-specialized trauma centre re-evaluating patient journeys to optimize SCI care through the development of a care map highlighting key clinical best practices.

EAST

VISTA Centre & Home and Community Care Support Services Champlain
Ottawa

a training program to increase awareness of brain injury and PTSD with resources for rehabilitation staff, individuals with lived experience and their carers. Includes navigation.

CENTRAL

Community Head Injury Resource Services & Community Networks of Specialized Care – Central East
North York & Midland

a comprehensive service resource library that considers the wide-ranging needs of individuals with brain injuries returning to the community. Includes cross-sector navigation information.

TORONTO

Hull-Ellis Concussion and Research Clinic & Toronto ABI Network
Toronto

a practical individualized online navigation tool for patients, their carers, and health practitioners to find and access publicly funded, specialized concussion care.

WEST

Hamilton Health Sciences & Lawson Health Research Institute
Hamilton & London

translation of a successful mental health education program into clinical rehabilitation practice benefiting people living with SCI and their carers.

If you’re interested in learning more, please reach out!
Julie Osbelt (Julie.Osbelt@uhn.ca)

ABI Navigator

TORONTO
CONCUSSION
NAVIGATOR

UHN Canada’s #1 Hospital

Scope Of The Problem

How many people sustain a TBI every year in Ontario?

Concussion: 170,000 - about 20% will have persisting symptoms: 35,000
Complex mild: 2,500
Moderate to severe: 3,500

TOTAL: 175,000 new injuries a year
Approximately 41,000 with ongoing needs

How do people get injured?

Concussion: 30% Fall; 3% MVC; Sport 5%; Unspecified 41%
Complex mild: **66% Fall**; 9% MVC
Moderate to severe: **71% Fall**; 11% MVC

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Scope Of The Problem

How many people with a moderate to severe TBI receive inpatient rehabilitation?

Specialized brain injury rehab: 9%
Mixed Neuro rehab: 4%
General rehab: 5%

TOTAL: 18%

How many people have follow-up with primary care after discharge from acute care and no inpatient rehabilitation?

within 30 days of discharge - 44%
within 90 days of discharge - an additional 16%

How many people get rehab from Ontario Health atHome after discharge from either acute care or inpatient rehab

Physiotherapy - 20%
Occupational Therapy - 21%
SLP or SW - 0.7%

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Healthcare Utilization

- Healthcare utilization is high 0-2 and 2-4 years after injury for all severity groups
- Table below shows 0–2-year healthcare utilization compared to the general population
- Mental health (MH) care utilization stays high overtime, suggesting ongoing MH needs for people with TBI

Type of Brain Injury	ER visits	MH utilization
Concussion/mild (no admission)	**2.4 X higher**	**1.8 X higher**
Complex mild (1-3 days admission)	**3.6 X higher**	**2.4 X higher**
Moderate to severe (4 or more days admission)	**4.2 X higher**	**2.7 X higher**

Ok now what?

‘*The best way to predict the future is to create it*’

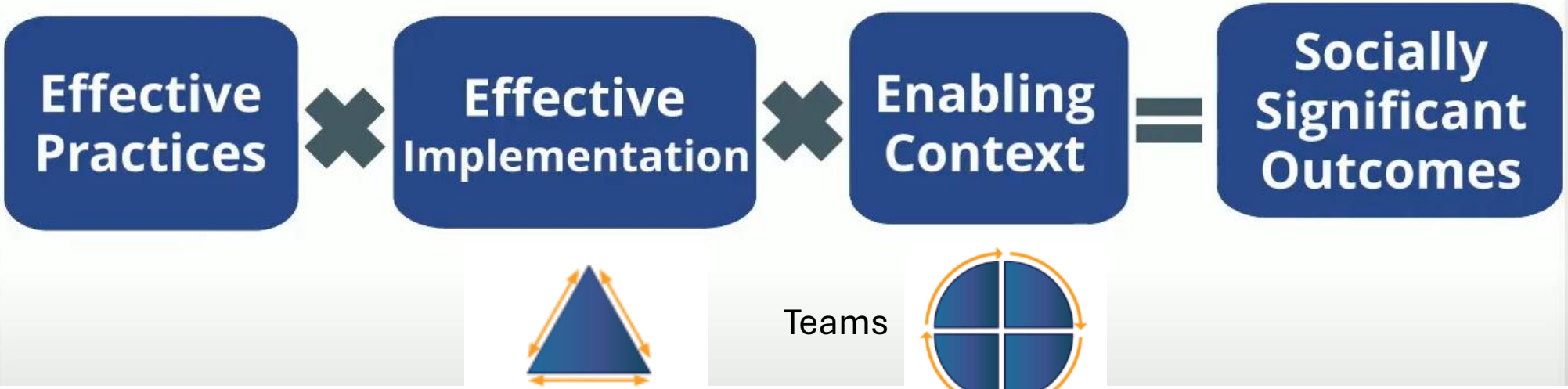
Peter Drucker

How do we build what we need?

Change?!

Active Implementation Formula

https://implementation.fpg.unc.edu/implementation-practice/



Keys to Implementation

Implementation Drivers are the components of infrastructure needed to develop, improve and sustain the ability of clinicians/healthcare providers to implement an innovation as intended, as well as create an enabling context for the new ways of work

Teams: An Implementation Team is a group of interested parties that oversees, attends to, and is accountable for key functions of innovation selection, implementation, and improvement. More specifically, an implementation team focuses its energy on developing and sustaining capacity to assure identified outcomes are achieved. An Implementation Team also engages in work that ensures relevant data are communicated up and across the system.

Guided Discussion

What are systemic issues and what are issues that are created by our institution/ourselves?

Do we engage in ‘referral and discharge’’ or ‘avoid’ rather than ‘share’ and ‘work together’?

We need to think if we say ‘No’ to providing care/services for someone, who is saying ‘Yes’

How collaborative are we with other streams of care for clients with complex situations?

Guided Discussion

Do we offer people the same care for the same injuries? Are we deciding who will make better gains in care before we really understand what might be the best/needed care?

Do we take the time to understand people's cultural and religious conceptualization of health and healing?

Are we using inclusive language?

Guided Discussion

Are we working on goals that the client/patient feels are meaningful to them?

Are we building agency so that the clients/patients don’t need us?

Are we creating the right follow up conditions so that the client/patient knows who to go to with a question and concern and for proactive care?

Do we know what is available to people locally?

We are in this with you....

The Neurotrauma Care Pathways Team has a provincial view and is supporting many groups and regions across the province.

We can provide:

- support with implementation across all stages of planning and execution
- preparation of infographics and material to support the Brain Injury Care Pathway
- data analysis and preparation of data reports
- connection to our network

Take Aways (others to be added in session)

- We have a multi-layered system: public and private that needs integration
- It is a 'wicked' (complex and difficult) problem to solve
- We all have a role to play in system transformation

- Standardization of care: order sets, algorithms, collect data using indicators
- We have to better work within the system that we have and then show the gaps if we want the government to invest more resources

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THANK YOU

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